

REMARKS

Claims 1-46 have been examined, and claims 1, 26-28, 32, 33 and 35 have been rejected under 35 U.S.C. § 103(a). Also, the Examiner has indicated that claims 2-25, 29-31, 34, and 36-39 contain allowable subject matter.

I. Preliminary matters

Applicants have amended the dependencies of claims 8, 9, 14-18, 25, and 46 because they were multiple dependent claims that dependent upon other multiple dependent claims. In addition, to maintain the current scope of protection for the invention, Applicants added new claims 47-58 which correspond to claims 8, 9, 14-18, 25, and 46. Furthermore, Applicants have changed the phrase “direct current applying means” to “directed current voltage applying means” in claims 1, 5, 6, 10, 14, and 15 so that the phrase is consistent throughout the claims. Clearly these amendments do not change the scope of the claims and do not raise any estoppel issues.

II. Rejection under 35 U.S.C. § 103(a) over U.S. Patent Publication No. 2003/0048351 to Ohkubo (“Ohkubo”), U.S. Patent No. 6,091,203 to Kawashima et al. (“Kawashima”), and U.S. Patent No. 6,836,067 to Imai (“Imai”)

Claim 1 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ohkubo, Kawashima, and Imai. Since claim 1 contains features that are similar to the allowable subject matter recited in claim 2, Applicants submit that claim 1 is patentable.

III. Rejection under 35 U.S.C. § 103(a) over U.S. Patent No. 6,998,209 to Ikuno et al. (“Ikuno”), U.S. Patent No. 5,994,019 to Okada et al. (“Okado”), U.S.P. 5,627,364 to Codama et al. (“Codama”), and U.S. Patent Publication No. 2003/0026624 to Sakata et al. (“Sakata”)

Claims 26-28 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ikuno, Okado, Codama, and Sakata.

A. Claim 26

Since claim 26 contains features that are similar to the allowable subject matter recited in claim 29, Applicants submit that claim 26 is patentable.

B. Claims 27 and 28

Since claims 27 and 28 have been canceled without prejudice or disclaimer, Applicants submit that the rejection is moot.

IV. Rejection under 35 U.S.C. § 103(a) over Ikuno, Okada, Codama, Sakata, U.S. Patent No. 5,734,941 to Teremy et al. (“Teremy”) and U.S. Patent No. 6,505,010 to Izumizaki et al. (“Izumizaki”)

Claims 32, 33, and 35 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ikuno, Okado, Codama, Sakata, Teremy, and Izumizaki.

A. Claim 32

Since claim 32 contains features that are similar to the allowable subject matter recited in claim 34, Applicants submit that claim 32 is patentable.

B. Claim 33

Since claim 33 contains features that are similar to the allowable subject matter recited in claim 36, Applicants submit that claim 33 is patentable.

C. Claim 35

Since claim 35 has been canceled without prejudice or disclaimer, the rejection of the claim is moot.

V. Objection to the claims

The Examiner has objected to claims 2-9, 29-31, 34, and 36-38 for being dependent upon a rejected base claim but acknowledges that they contain allowable subject matter. Since claims 2, 29, and 36 have been canceled without prejudice or disclaimer, the rejection of these claim is moot. Also, since claims 3-9, 30, 31, 34, 37, and 38 depend upon claim 1, 26, and 33 and since the rejection of claims 1, 26, and 33 has been overcome, Applicants submit that the objection of claims 3-9, 30, 31, 34, 37, and 38 is likewise overcome.

VI. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appl. No. 10/670,803

Attorney docket No. Q77692

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

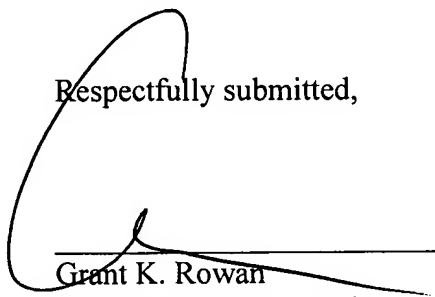
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